

Appln No. 10/662,595
Amdt date August 19, 2005
Reply to Office action of May 19, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A fiber optic package comprising an optical fiber bonded to a substrate surface by an epoxy covered by a diffusion retarding plate formed of a moisture-resistant material, said diffusion retarding plate covering an entire upper surface of said epoxy.

2. (Original) The fiber optic package as in claim 1, wherein said optical fiber is disposed over said substrate surface and said epoxy surrounds a length of said optical fiber.

3. (Original) The fiber optic package as in claim 1, wherein said optical fiber is disposed over said substrate surface and said epoxy includes a top portion formed over said optical fiber and lateral portions formed adjacent each of opposed sides of said optical fiber, said diffusion retarding plate disposed over said top portion and over said lateral portions.

4. (Original) The fiber optic package as in claim 3, wherein said lateral portions each include a width being about 10 to 20 times as great as a diameter of said optical fiber.

5. (Original) The fiber optic package as in claim 3, in which said optical fiber is disposed on said substrate surface.

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6. (Original) The fiber optic package as in claim 1, wherein said optical fiber is disposed over said substrate surface and said epoxy includes a top portion formed over said optical fiber and including a thickness ranging from 0.5 to 1 times a diameter of said optical fiber.

7. (Original) The fiber optic package as in claim 1, wherein said diffusion retarding plate includes a bottom surface that is substantially conterminous with said epoxy.

8. (Original) The fiber optic package as in claim 1, wherein said diffusion retarding plate is substantially planar and parallel to said substrate surface.

9. (Original) The fiber optic package as in claim 1, wherein said diffusion retarding plate is formed of one of ceramic and metal.

10. (Original) The fiber optic package as in claim 1, wherein said epoxy is a non-conductive epoxy.

11. (Original) The fiber optic package as in claim 1, wherein said fiber optic package comprises an optical subassembly, and said optical fiber, said substrate surface, said epoxy and said diffusion retarding plate form part of said optical subassembly.

12. (Original) The fiber optic package as in claim 1, wherein said fiber optic package comprises at least one of a transmitting optical subassembly and a receiver optical subassembly.

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13. (Original) The fiber optic package as in claim 1, wherein said diffusion retarding plate further includes opposed legs that contact said substrate surface.

14. (Original) The fiber optic package as in claim 13, wherein said epoxy is bounded superjacently by an upper portion of said diffusion retarding plate, and at least part of said epoxy is bounded laterally by said legs of said diffusion retarding plate.

15. (Currently Amended) An optical subassembly comprising an epoxy formed over a substrate surface, a diffusion retarding plate formed over said epoxy, and an optical fiber disposed between said diffusion retarding plate and said substrate surface, said diffusion retarding plate covering an entire upper surface of said epoxy.

16. (Original) The optical subassembly as in claim 15, wherein said optical fiber extends through said epoxy.

17. (Original) The optical subassembly as in claim 15, further comprising said diffusion retarding plate including legs that laterally bound said epoxy.

18. (Currently Amended) A non-hermetic fiber optic package comprising an optical fiber joined to a substrate by an epoxy that is at least partially separated from air by a moisture-resistant member, said moisture-resistant member covering an entire top surface of the epoxy.

19. (Currently Amended) The non-hermetic fiber optic package as in claim 18, wherein said moisture resistant member

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comprises a plate and said ~~epoxy include~~ a top surface of said epoxy that forms a conterminous boundary with said plate.

20. (Original) The non-hermetic fiber optic package as in claim 18, wherein said moisture resistant member comprises a cover that substantially directly surrounds said epoxy superjacently and laterally.

21. (Currently Amended) A method for forming a non-hermetic fiber optic package, comprising:

providing an optical subassembly including a substrate and an optical fiber;

joining said optical fiber to said substrate with an epoxy; and

covering an entire top surface of said epoxy with a diffusion retarding plate, said diffusion retarding plate formed of a moisture-resistant material.

22. (Original) The method as in claim 21, wherein said covering comprises disposing said diffusion retarding plate directly on said epoxy.

23. (Currently Amended) The method as in claim 21, wherein said joining includes surrounding a circumferential portion of said optical fiber with said epoxy.

24. (Original) The method as in claim 21, wherein said joining and covering comprise positioning an optical fiber over a surface of said substrate and covering said optical fiber with said epoxy.

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25. (Original) The method as in claim 21, wherein said joining comprises forming said epoxy over and adjacent said optical fiber, said epoxy therefore including adjacent sections, and

said covering includes covering said adjacent sections with said diffusion retarding plate.

26. (Original) The method as in claim 21, wherein said diffusion retarding plate further includes legs and said covering includes positioning said legs to bound opposed sides of said epoxy.

27. (Original) The method as in claim 21, wherein said joining comprises fixing said optical fiber in position using a first portion of said epoxy then adding a second portion of said epoxy, said first portion comprising a UV epoxy and said second portion comprising a thermal epoxy.